

N. Johnson

1642

#23

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/892,695A

DATE: 10/22/1999
TIME: 15:39:48

Input Set: H892695A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Gray, Joe W
2 Collins, Collin
3 Hwang, Soo In
4 Godfrey, Tony
5 Kowel, David
6 Rommens, Johanna
7 <120> TITLE OF INVENTION: GENES FROM THE 20Q13 AMPLICON AND THEIR USES
8 <130> FILE REFERENCE: 2500.124US3
9 <140> CURRENT APPLICATION NUMBER: US/08/892,695A
10 <141> CURRENT FILING DATE: 1997-07-15
11 <150> EARLIER APPLICATION NUMBER: 08/785,532
12 <151> EARLIER FILING DATE: 1997-01-17
13 <150> EARLIER APPLICATION NUMBER: 08/731,499
14 <151> EARLIER FILING DATE: 1996-10-16
15 <150> EARLIER APPLICATION NUMBER: 08/680,395
16 <151> EARLIER FILING DATE: 1996-07-15
17 <160> NUMBER OF SEQ ID NOS: 59
18 <170> SOFTWARE: PatentIn Ver. 2.0
19 <210> SEQ ID NO 1
20 <211> LENGTH: 3000
21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial Sequence
23 <220> FEATURE:
24 <223> OTHER INFORMATION: Description of Artificial Sequence:3bf4
25 <400> SEQUENCE: 1
26 ccgccggccg gggcgccctgg ctgcactcag cgccggagcc gggagctagc ggccgcccgc 60
27 atgtcccacc agaccggcat ccaagcaagt gaagatgtta aagagatctt tgccagagcc 120
28 agaaatggaa agtacagact tctgaaaata tctattgaaa atgagcaact tgtgattgga 180
29 tcatatagtc agccttcaga ttccctggat aaggattatg attcctttgt ttaccacctg 240
30 ttggaggaca aacaaccatg ctatatatta ttcaggttag attctcagaa tgcccaggga 300
31 tatgaatgga tattcattgc atggtctcca gatcattctc atgttcgtca aaaaatgttg 360
32 tatgcagcaa caagagcaac tctgaagaag gaatttggag gtggccacat taaagatgaa 420
33 gtatttggaa cagtaaagga agatgtatca ttacatggat ataaaaaata cttgctgtca 480
34 caatcttccc ctgccccact gactgcagct gaggaagaac tacgacagat taaaatcaat 540
35 gaggtacaga ctgacgtggg tgtggacact aagcatcaaa cactacaagg agtagcattt 600
36 cccatttctc gagaagcctt tcaggctttg gaaaaattga ataatagaca gctcaactat 660
37 gtgcagttgg aaatagatat aaaaaatgaa attataattt tggccaacac aacaaataca 720
38 gaactgaaag atttgccaaa gaggattccc aaggattcag ctcgttacca tttctttctg 780
39 tataaacatt cccatgaagg agactattta gagtccatag tttttattta ttcaatgcct 840
40 ggatacacat gcagtataag agagcggatg ctgtattcta gctgcaagag ccgtctgcta 900
41 gaaattgtag aaagacaact acaaatggat gtaattagaa agatcgagat agacaatggg 960
42 gatgagttga ctgcagaact cctttatgaa gaagtacatc ccaagcagca tgcacacaag 1020
43 caaagttttg caaaaccaa aggtcctgca ggaaaaagag gaattcgaag actaattagg 1080
44 ggcccagcgg aaactgaagc tactactgat taaagtcatc acattaaaca ttgtaatact 1140

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/892,695A

DATE: 10/22/1999
TIME: 15:39:48

Input Set: H892695A.RAW

```

45      agtttttttaa aagtccagct ttttagtacag gagaactgaa atcattccat gttgatataa 1200
46      agtagggaaa aaaattgtac tttttggaaa atagcacttt tcacttctgt gtgttttttaa 1260
47      aattaatggt atagaagact catgatttct atttttgagt taaagctaga aaaggggttca 1320
48      acataatggt taattttgtc acactgtttt catagcgttg attccacact tcaaatactt 1380
49      cttaaaatgt tatacagttg ggccagttct agaaagtctg atgtctcaaa gggtaaactt 1440
50      actactttct tgtgggacag aaagacctta aaatattcat attacttaat gaatatgtta 1500
51      aggaccaggc tagagtattt tctaagctgg aaacttagtg tgccttgga aagccgcaag 1560
52      ttgcttactc cgagtagctg tgctagctct gtcagactgt aggatcatgt ctgcaacttt 1620
53      tagaaatagt gctttatatt gcagcagctt tttatatttg actttttttt aatagcatta 1680
54      aaattgcaga tcagctcact ctgaaacttt aagggtagca gatattttct atactgcagg 1740
55      atttctgatg acattgaaag acttttaaca gccttagtaa attatctttc taatgctctg 1800
56      tgaggccaaa catttatgtt cagattgaaa tttaaattaa tatcattcaa aaggaaacaa 1860
57      aaaatgttga gttttaaaaa tcaggattga cttttttctc caaaaccata catttatggg 1920
58      caaattgtgt tctttatcac ttccgagcaa atactcagat ttaaaattac tttaaagtcc 1980
59      tggtaacttaa caggctaacg tagataaaca ctttaataat ctcagttaat actgtatttc 2040
60      aaaaacacatt taactgtttt ctaatgcttt gcattatcag ttacaaccta gagagatttt 2100
61      gagcctcata tttctttgat acttgaaata gaggagcta gaacacttaa tgtttaatct 2160
62      gttaaacctg ctgcaagagc cataactttg aggcattttc taaatgaact gtggggatcc 2220
63      aggatttgta atttcttgat ctaaacttta tgctgcataa atcacttatc ggaaatgcac 2280
64      atttcatagt gtgaagcact cttttctaaa cttattatc taaggtaata tatgcacctt 2340
65      tcagaaaattt gtgttcgagt aagtaaagca tattagaata attgtgggtt gacagatttt 2400
66      taaaatagaa tttagagtat ttggggtttt gtttgtttac aaataatcag actataatat 2460
67      ttaaacaatgc aaaataactg acaataatgt tgcacttggt tactaaagat ataagttgtt 2520
68      ccatgggtgt acacgtagac agacacacat acacccaaat tattgcatta agaatcctgg 2580
69      agcagaccat agctgaagct gttattttca gtcaggaaga ctacctgtca tgaaggata 2640
70      aaataattta gaagtgaatg tttttctgta ccatctatgt gcaattatac tctaaattcc 2700
71      actacactac attaaagtaa atggacattc cagaatatag atgtgattat agtcttaaac 2760
72      taattattat taaaccaatg attgctgaaa atcagtgatg catttggtat agagtataac 2820
73      tcatcgttta cagtatgttt tagttggcag tatcatacct agatggtgaa taacatattc 2880
74      ccagtaaat tatatagcag tgaagaatta catgccttct ggtggacatt ttataagtgc 2940
75      attttatatc acaataaaaa ttttttctct ttaaaaaaaa aaaacaagaa aaaaaaaaaa 3000
76      <210> SEQ ID NO 2
77      <211> LENGTH: 723
78      <212> TYPE: DNA
79      <213> ORGANISM: Artificial Sequence
80      <220> FEATURE:
81      <223> OTHER INFORMATION: Description of Artificial Sequence:1b11
82      <400> SEQUENCE: 2
83      tggaagctgt catggttacc gtctctaacg ttggactctt aagaaaatga ttattcctgg 60
84      tttctagaca ggccaaatgt aattcaccta cgtggcagat taaagagggtg ggcttactag 120
85      atttgattgg gtattgagca tgctctgaat gacagtcccc aaaaaggacc tcttatccgt 180
86      tcttccccctt ggggaagggc ttttgccact tccatgtcaa tgtggcagtt gagcttgga 240
87      attggtgctg tgtacaacat aagcattact tctccaagat gtgcctgtgt agaaatggtc 300
88      atagattcaa aactgtagct actatgtgga caggggggca gcaaggaccc cactttgtaa 360
89      aacatgtttt gggggaatgt tttgtttttc attttcttat tacctggcaa aataatccag 420
90      gtggtgtgtg agtcaccagt agagattata aagtccaagg aagtagaatc agccttataa 480
91      acagtggacc tcaacgaagg agatgctgca cctgaaccca cwgaagcgaa actcaaaaga 540
92      gaagaaagca aaccaagaac ctctctgatg rcgtttctca gacaaatggg aagcccccta 600
93      cttccagtat aggaaaccta agatacctag agcggtttt gggaacaatg ggctcatgcc 660
94      acaggtagta ggagacataa ttgtagctgg tgtgtatgga atgtgaatgg aatatggatt 720

```

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/892,695A

DATE: 10/22/1999
TIME: 15:39:48

Input Set: H892695A.RAW

95 gcg 723

96 <210> SEQ ID NO 3

97 <211> LENGTH: 1507

98 <212> TYPE: DNA

99 <213> ORGANISM: Artificial Sequence

100 <220> FEATURE:

101 <223> OTHER INFORMATION: Description of Artificial Sequence:cc49

102 <220> FEATURE:

103 <221> NAME/KEY: modified_base

104 <222> LOCATION: (447)

105 <223> OTHER INFORMATION: N is A, G, G, T, or U

106 <400> SEQUENCE: 3

107 gcaggttgct gggattgact tcttgctcaa ttgaaacact cattcaatgg agacaaagag 60

108 cactaatgct ttgtgctgat tcatatttga atcgaggcat tgggaaccct gtatgccttg 120

109 tttgtggaaa gaaccagtga caccatcact gagcttccta aaagttcgaa gaagttagag 180

110 gactatacac tttcttttga acttttataa taaatatttg ctctggtttt ggaaccagg 240

111 actgttagag ggtgagtgc aggtcttaca gtggccttaa tccaactcca gaaattgcc 300

112 aacggaactt tgagattata tgcaatcgaa agtgacagga aacatgccaa ctcaatccct 360

113 cttaatgtac atggatggcc aagagtgcatt ggcagctctc ttgccagtcc gatggagatg 420

W--X 114 gagatgcctt gtcaatgaaa gggcccctg ttgtcaattc cgagctacac aaagaaaaaa 480

115 atgtcaatcc gaatcgaggg gaatatgccc ttggattgca tgttctgcag ccagaccttc 540

116 acacattcag aagaccttaa taaacatgtc ttaatgcaac accggcctac cctctgtgaa 600

117 ccagcagttc ttcgggttga agcagagtat ctgagtcgc ttgataaaaag tcaagtgcga 660

118 acagaacctc ccaaggaaaa gaattgcaag gaaaatgaat ttagctgtga ggtatgtggg 720

119 cagacattta gagtcgcttt tgatgttgag atccacatga gaacacacaa agattctttc 780

120 acttacgggt gtaacatgtg cggaagaaga ttcaaggagc cttggtttct taaaaatcac 840

121 atgcggacrc ataatggcaa atcgggggcc agaagcaaac tgcagcaagg cttggagagt 900

122 agtccagcaa cgatcaacga ggtcgtccag gtgcacgcgg ccgagagcat ctctctcct 960

123 tgcaaaatct gcatggttg ttgcttccta tttccaaata aagaaagtct aattgagcac 1020

124 cgcaagggtc acacaaaaaa aactgctttc ggtaccagca gcgcgcagac agactctcca 1080

125 caaggaggaa tgccgtcctc gagggaggac ttctgagcagc tgttcaactt gagacaaaaa 1140

126 tctcaccctg aaacggggaa gaagcctgtc agatgcattc ctgagctcga tccgttcacc 1200

127 accttcagg cttggcact ggctacaaa ggaawagttg ccatttgcca agaagtgaag 1260

128 gaattggggc aagaaggagg caccgacaac gacgattcga gttccgagaa ggagcttggg 1320

129 gaaacaaata agaaccattg tgcaggcctc tcgcaagaga aagagaagtg caaacactcc 1380

130 cacggcgaag cgccctccgt ggacgcggat cccaagttac ccagtagcaa ggagaagccc 1440

131 actcactgct ccgagtgcgg caaagctttc agaacctacc accagctggt cttgcactcc 1500

132 aggttcc 1507

133 <210> SEQ ID NO 4

134 <211> LENGTH: 2605

135 <212> TYPE: DNA

136 <213> ORGANISM: Artificial Sequence

137 <220> FEATURE:

138 <223> OTHER INFORMATION: Description of Artificial Sequence:cc43

139 <400> SEQUENCE: 4

140 caagctcgaa attaaccctc actaaaggga acaaaaagctg gagctccacc gcggtggcgg 60

141 ccgctctaga actagtggat cccccgggct gcaggaattc ggcacgagct gggctactac 120

142 gatggcgatg agtttcgagt ggccgtggca gtatcgcttc ccacccttct ttacgttaca 180

143 accgaatgtg gacactcggc agaagcagct ggccgcctgg tgctcgctgg tcctgtcctt 240

144 ctgccgcctg cacaacagc ccagcatgac ggtgatggaa gctcaggaga gcccgtctt 300

PAGE: 4

RAW SEQUENCE LISTING PATENT APPLICATION US/08/892,695A

DATE: 10/22/1999
TIME: 15:39:48

Input Set: H892695A.RAW

```

145   caacaacgtc aagctacagc gaaagcttcc tgtggagtcg atccagattg tattagagga 360
146   actgaggaag aaagggaacc tcgagtgggt ggataagagc aagtcacagc tcctgatcat 420
147   gtggcggagg ccagaagaat gggggaaact catctatcag tgggtttcca ggagtggcca 480
148   gaacaactcc gtctttaccc tgtatgaact gactaatggg gaagacacag aggatgagga 540
149   gttccacggg ctggatgaag ccactctact gcgggctctg caggccctac agcaggagca 600
150   caaggccgag atcatcactg tcagcgatgg ccgaggcgtc aagttcttct agcagggacc 660
151   tgtctccctt tactttcttac ctcccacctt tccagggtt tcaaaaggag acagaccag 720
152   tgtcccccac agactggatc tgtgactcca ccagactcaa aaggactcca gtcctgaagg 780
153   ctgggacctg gggatgggtt tctcacaccc catatgtctg tcccttggat agggtgaggc 840
154   tgaagcacca gggagaaaat atgtgcttct tctcgcccta cctcctttcc catcctagac 900
155   tgtccttgag ccagggtctg taaacctgac actttatatg tgttcacaca tgtaagtaca 960
156   tacacacatg cgctgcagc acatgcttct gtctcctcct cctcccaccc ctttagctgc 1020
157   tgttgcttcc cttctcaggc tgggtgctgga tccttcttag gggatggggg aagccctggc 1080
158   tgcaggcagc cttccaggca atatgaagat aggaggccca cgggcctggc agtgagaggt 1140
159   gtggcccccac accgatttat gatattaaaa tctcaactcc caaaaaaaaaa aaaaaaaaaa 1200
160   ctgagactag ttctctctct ctcgagaact agtctcagat tttttttttt tttttttttt 1260
161   tttttttttt tttttttttg gctttaagga tttatttatt gtttcctctt tacagtgtcc 1320
162   acttttctct acttaatact actttccagt ctcagaagcc cagagggaaa aaaaaaagac 1380
163   catgaatctt cctctcccag attaaagtac acactttgga aaacagattg gaaaaccttt 1440
164   ctgaaaaaag ttgactgaaa ctccaaacca acatgccata ttgttgatgt tgctcatgaa 1500
165   aattgttaaa aacctgttct agataaagaa cagtctcaag tttttgtaca gcctacacat 1560
166   agtacaaggg tcccctatga tgattcttct gtaggacgaa ataatgtaat tttttcagtt 1620
167   tctggtttat aactctctcg atctcagagt tgactgatta aaacacctac tcatgcaaca 1680
168   gagaataaag cactcatatt ttataaatt atatggacca aactattttg gaaatcttat 1740
169   ctattggaga cacaatatgc tggactaaag caataattat tttattctca atgtctgtgc 1800
170   taacctcaat gacttagaat gctttgctat attttgctc tatgcctcaa ccacactggc 1860
171   tttcttttag ctcttgaaac agccaaactg cttcctgcct caggaccaga tattttgagg 1920
172   cttctcttaa gaattctatt tccttaattc tttatctggg taacttagtt ttatccaaca 1980
173   cttcagatcc tgccgtaaaa actcttctta tagaagcctg tcatgacact gtctctcttc 2040
174   tccaacatac tcaccagcac acatgtagac tagattagaa cctcctgttt ttctttttca 2100
175   tacttttctc tatcatgctt cctccatta taatattttt attatgtgtg tgaatgtctg 2160
176   ccccaagtca gtttctctac taaactataa actccgtaaa gctgggatcc ttccaatttt 2220
177   gatcaccact tagtacagta ggaacacagt aaagattcaa ttggtatttg tggaatgaat 2280
178   gaatgaattg ttttgctagt aaagtctggg ggaaccaggg tgagaagagc ctagaaagca 2340
179   ggtcgaatcc aaggctagat agacttagtg ttactcaaga aagggtagcc tgaaaataaa 2400
180   ggttcaaatt atagtcaaga atagtcaaga catgggcaag acaagagtgc tgctcgtgcc 2460
181   gaattcgata tcaagcttat cgataccgtc gacctcgagg gggggcccgg tacccaattc 2520
182   gccctatagt gagtctgatt acaattcaat ggccgtcggt ttacaacgtc gtgactggga 2580
183   aaacctgggc gttacccaac ttaat                                     2605
184   <210> SEQ ID NO 5
185   <211> LENGTH: 1288
186   <212> TYPE: DNA
187   <213> ORGANISM: Artificial Sequence
188   <220> FEATURE:
189   <223> OTHER INFORMATION: Description of Artificial Sequence:41.1
190   <400> SEQUENCE: 5
191   gagggcagcg agaaggagaa accccagccc ctggagccca catctgctct gagcaatggg 60
192   tgcgccctcg ccaaccagcg cccggccttg ccatgcatca acccactcag cgccctgcag 120
193   tccgtcctga acaatcactt gggcaaagcc acggagccct tgcgtcacc ttctgctcc 180
194   agcccaagtt caagcacaat ttccatgttc cacaagtcca atctcaatgt catggacaag 240

```

PAGE: 5

RAW SEQUENCE LISTING PATENT APPLICATION US/08/892,695A

DATE: 10/22/1999
TIME: 15:39:48

Input Set: H892695A.RAW

```

195   ccggtcttga gtcctgcctc cacaaggtca gccagcgtgt ccaggcgcta cctgtttgag 300
196   aacagcgatc agcccattga cctgaccaag tccaaaagca agaaagccga gtccctcgaa 360
197   gcacaatctt gtatgtcccc acctcagaag cacgctctgt ctgacatcgc cgacatggtc 420
198   aaagtcctcc ccaaagccac cccccaaaag ccagcctcct cctccagggt ccccccatg 480
199   aagctggaaa tggatgtcag gcgctttgag gatgtctcca gtgaagtctc aactttgcat 540
200   aaaagaaaag gccggcagtc caactggaat cctcagcatc ttctgattct acaagcccag 600
201   tttgcctcga gcctcttcca gacatcagag ggcaaatacc tgctgtctga tctgggcccc 660
202   caagagcgta tgcaaatact taagtttacg ggactctcaa tgaccactat cagtcactgg 720
203   ctggccaacg tcaagtacca gcttaggaaa acgggcggga caaaatttct gaaaaacatg 780
204   gacaaaggcc accccatctt ttattgcagt gactgtgcct ccagttcag aacccttct 840
205   acctacatca gtcacttaga atctcacctg ggtttccaaa tgaaggacat gaccgccttg 900
206   tcagtggacc agcaaagcaa ggtggagcaa gagatctccc gggtatcgtc ggctcagagg 960
207   tctccagaaa caatagctgc cgaagaggac acagactcta aattcaagtg taagttgtgc 1020
208   tgtcggacat ttgtgagcaa acatgcggta aaactccacc taagcaaac gcacagcaag 1080
209   tcaccggaac accattcaca gtttgaaca gacgtggatg aagaatagct ctgcaggacg 1140
210   aatgccttag ttccacttt ccagcctgga tccctcaca ctgaacctt cttcgttgca 1200
211   ccctcctgct tctgacattg aactcattga actcctcctg acaccctggc tctgagaaga 1260
212   ctgccaacaa aaaaaaaaaa aaaaattc                                1288
213   <210> SEQ ID NO 6
214   <211> LENGTH: 2821
215   <212> TYPE: DNA
216   <213> ORGANISM: Artificial Sequence
217   <220> FEATURE:
218   <223> OTHER INFORMATION: Description of Artificial Sequence:GCAP
219   <400> SEQUENCE: 6
220   atcctaagac gcacagcctg ggaagccagc actggggaag tgggtgctgag ggatgtgggt 60
221   cactggggtg aaggtggagc tttcagggtc tcccgtaaat gcagctgagt tttctttggc 120
222   agggaattta ccagctgaag aaagcctgcc ggcgagagct acaaactgag caaggccagc 180
223   tgctcacacc cgaggaggtc gtggacagga tcttctcctt ggtggatgag aatggagatg 240
224   gtaagagggg cagagatggg gagagtgtctg tccactctgc atcatcgcca ctttctggcc 300
225   gcacgtcctt gggcaaggcc ctccaccttc caacctggg gtccctcatct gtgagaaggc 360
226   tgtggagaag atgtcatgaa ctaacaaagg gactcatgag cacgtgtttg taggagtgtg 420
227   taaaagtcct acaggagttg ctgatggagg ccaggcacgc agaatagaaa gaataggaac 480
228   tttggagtca ggcaggaggt gatataattga gcttctcgtc ctagtctcaa tttcctcatc 540
229   tggaaaatgg ggataataat agtggttgag aggaatgaat aggataatgt gtttaagagc 600
230   aggcataagg tagacctcca ttcaggctgc ttgggctttc ctccctgtag cccaaagccc 660
231   agcctcaggg ctatgtgggg agagagctgg cttggaatac acacttgagc cctccagctc 720
232   tctcagctcc acccagcatt tccgtgttac catgcgcaaa agtaaaactt caattcatca 780
233   gcaaagaaaag ccccttaaag gtggcaggag actcctggag attcagacac ctgacaagcc 840
234   gcaagcttga ggtctgagac tgcaggatag ttggcataag acgtgtaggc gcacctctgg 900
235   agcgaggtct ctctcctgc cccagacccc aggtctcccc ttcttctaca tgaccacctc 960
236   tcttccccct tgctcaggcc agctgtctct gaacgagttt gttgaagggt cccgtcggga 1020
237   caagtgggtg atgaagatgc tgcagatgga catgaatccc agcagctggc tcgctcagca 1080
238   gagacgaaa agtgccatgt tctgaggagt ctggggcccc tccacgactc caggctcacc 1140
239   caggtttcca gggtagtagg agggctccct ggctcagcct gctcatgccc actcttcccc 1200
240   tgggtgtgac ttcctggcac cccctgtgca gggctgagtg gggatgggga agggctgctg 1260
241   gggttgaagt ggccaacagg gcatagtcca ttttgaggga gtccctggga tgggtgaagg 1320
242   aattcagtta cttttcctgt tcagccgctc ctgggaggac tgtgccttgg ctgggtggtt 1380
243   gtggggctcc cacagtttct ggggtgtctc agttggaagc aagagccaac tgaggggtga 1440
244   gggtccaca gaccaaata gaaatgagaa cacaaagact ggtaggaggc aggggtggga 1500

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: H892695A.RAW

Line	? Error/Warning	Original Text
114	W "N" or "Xaa" used: Feature required	gagatgcctt gtcaatgaaa gggcccnctg ttgtcaat
298	W "N" or "Xaa" used: Feature required	ggggtagggg gggganagtt aacctgctgg ctgtgant
318	W "N" or "Xaa" used: Feature required	gaaatcagaa gtttaatatg acacaattaa atatattt
325	W "N" or "Xaa" used: Feature required	tggtcaatga agtgaattgt cctatttcng ggggt
812	W "N" or "Xaa" used: Feature required	ggcttaccac nactgccgtt aagtcgtgtn aagtcacc
813	W "N" or "Xaa" used: Feature required	ttctgcaaag gcaggagnca ctttctctcc agtgctca
815	W "N" or "Xaa" used: Feature required	ggtgatattg naacatggta gggctgaccg tggctgtg
816	W "N" or "Xaa" used: Feature required	nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnn
817	W "N" or "Xaa" used: Feature required	nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnccca
822	W "N" or "Xaa" used: Feature required	taacaaaaat ttattggacc ccacacacnn nnnnnnnn
823	W "N" or "Xaa" used: Feature required	nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnn
824	W "N" or "Xaa" used: Feature required	nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnctct
875	W "N" or "Xaa" used: Feature required	tncaatatca ccgcagatgg cgagccttta ggccatgt